

REMARKS

Claims 1-9 are pending in the present application. Claims 2 and 3 are herein amended.

Claims 4-7 are withdrawn. Claims 8 and 9 are newly added.

Claim Rejections - 35 U.S.C. § 103(a)

Claims 1-3 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **Fuller** (US 3,121,078) in view of **Li** (US 6,911,129). Favorable reconsideration is requested.

The Office Action appears to reject the claims based on Li alone and based on Fuller in view of Li. However, the rejection as specifically stated in the Office Action is repeated as Fuller in view of Li. (See Paragraphs 4 and 5.) Clarification is requested.

(1) Applicants respectfully submit that neither Li nor Fuller in view of Li teach or suggest:

 said first single action edge acts to determine a film thickness gradient of a first material, said second single action edge acts to determine a film thickness gradient of a second material, and said third single action edge acts to determine a film thickness gradient of a third material, and

 the film is a ternary phase diagrammatic system which is composed with the first, second and third materials

as recited in claim 1 and amended claim 3; and that these features would not have been obvious.

The Office Action cites Fig. 9 of Li for disclosing the above-noted features. (See Office Action, pages 2 and 4.) The Office Action acknowledges that Li does not disclose single action edges as being a part of a single mask that is moved in a uniaxial direction. (Office Action, page 3.) The Office Action takes the position that it would have been obvious to modify the three plates of Li into a single mask as shown in Fig. 4 of Li.

Li teaches that nozzle slits are arranged in triangular shape (Fig. 9), and also that the mask moves in a uniaxial direction (Fig. 4). However, Li only teaches nozzle slits 85A, 85B, and 85C which are arranged 120° to each other in Fig. 9, and does not teach that film thickness gradient can be made by moving the edges of these nozzle slits. That is, Fig. 9 does not show that the film thickness gradient can be made by moving the edges of the slits. Therefore, Li's nozzle slits are merely disclosed as a hole, and does not correspond to the first, second, and third single action edges of the present invention as recited in the claims.

Furthermore, even if Li's mask of Fig. 9 is moved in a uniaxial direction like the mask of Fig. 4, a ternary phase diagram thin film cannot be formed as recited in the claims.

Fuller discloses a masking disk 75 having triangular apertures in Figs. 7 and 9, but this masking disk 75 is not for forming a ternary phase diagram thin film. Furthermore, the present claims recite means for moving the mask in a uniaxial direction as opposed to rotating the mask.

(2) Applicants respectfully submit that neither Li nor Fuller in view of Li teach or suggest "a single disk having a first, a second and a third cutout" as recited in claim 3. Fuller discloses a masking disk 75 having triangular apertures. Fuller does not teach or suggest a single disk having cutouts.

New Claims

Claims 8 and 9 are newly added. As stated above Li does not teach that a film thickness gradient can be made by moving the edges of the nozzle slits, and that a ternary phase diagram can be formed.

For at least the foregoing reasons, claims 1-3, 8 and 9 are patentable over the cited

references. Accordingly, withdrawal of the rejection of claims 1-3 is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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